

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
13 October 2005 (13.10.2005)

PCT

(10) International Publication Number
WO 2005/095525 A1

- (51) International Patent Classification⁷: **C09C 1/30**
- (21) International Application Number:
PCT/EP2005/001229
- (22) International Filing Date: 8 February 2005 (08.02.2005)
- (25) Filing Language: English
- (26) Publication Language: English
- (30) Priority Data:
10 2004 010 756.4 5 March 2004 (05.03.2004) DE
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- (81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (unless otherwise indicated, for every kind of regional protection available): European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR).
- Declaration under Rule 4.17:**
— of inventorship (Rule 4.17(iv)) for US only
- Published:**
— with international search report
- For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: **SILANISED SILICAS**

(57) **Abstract:** Silanised, structurally modified silicas, characterised by vinyl groups or vinyl silyl groups fixed to the surface, hydrophobic groups such as trimethyl silyl and/or dimethyl silyl and/or monomethyl silyl additionally being fixed to the surface, having the following physico-chemical properties: BET surface area m²/g: 25 - 400 Average primary particle size nm: 5 - 50 pH: 3-10 Carbon content %: 0.1-10 DBP value %: < 200 or not determinable are produced by treating silica with a surface-modifying agent, heat treating and then structurally modifying the mixture obtained. The silica can be used as a filler in silicone rubber.

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